Thun Field - September 2009

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### **Meeting Notice**

# Tuesday, September 8th, 7 PM CAP Building, Thun Field

Program: APRS tracking. Automatic Position Reporting System made possible by amateur radio stations. Mark McClain

**Refreshments: Brice Johnson** 

#### **How Could I?**

After spending 18 months building and 6 years flying across most of America I sold my RV9A... I'll stop a minute and let that sink in...

So parting with the RV was hard I'll admit it. What was the most difficult was making the decision. It made me physically sick for a week before, but then once the plan was set I became at peace with it. You know if things change down the line I can always build another RV. I built this one in 18 months so the next one could be even faster.

It was a bit strange flying for the first time in 700 hours from the right seat and checking out the new owner in "his" plane, but I kept busy with inspecting my new plane and was thinking about the return trip home. My new plane was down in Las Vegas so I flew down on a Saturday, spent all day Sunday doing inspections and work on both planes with an A&P on the ramp in the heat. Then got up at 4:30am Monday and left at first light in my new Kitfox 7. Really had a blast flying home. Flew low, much lower than I have ever done on a cross country and watched the sights unfold. I would climb over a small ridge and found wild horses running through the desert on the other side! By the time it heated up enough to get really bumpy I was all the way north to Bend OR. Then I crossed over to Aurora and Scappoose, back up the usual road home and was greeted by rain north of Olympia.

I'm already diving in and working on stuff. Had to get the controls loosened up a bit as they were really stiff for some reason. Replaced the com radio with a new Icom A210, panel mounted my Garmin 495 gps (I kept it from the RV). Started a wiring cleanup / removal of unneeded stuff. I have plans to put it on a diet and clear out quite a bit of stuff that the builder put in. Stuff I don't think is needed for a simple LSA. Dual batteries, dual alternators, etc etc etc... I also have the gear to put it on tundra tires with a tail wheel, which I plan to do once I get a few hours in it as a tri gear. You can switch between both setup's in a few hours. I did the first condition inspection up at Arlington with Jim Scott of Aircore Aviation. I plan to take the E-LSA maintenance class later this fall which will allow me to do the

annual condition inspections just the same as if I had built the plane. There are some neat features of this new LSA category.

Cruise is 120 mph the way it's pitched right now, at 80 mph or less you can fly with both doors open. Just swing them up in flight! Stall is in the 40's. Can haul 150 lbs in the baggage area inside of CG, however it's easy to bust the 1320 LSA weight with too much back there. Holds 27 gallons in the wings and with the Rotax 912 burning just 5gph you have 4 hours of range.

Here it is at Auburn Academy Airstrip.



More pictures here:

http://www.flickr.com/photos/akarmy/sets/72157621936677233/

So the question was HOW COULD I, but I have found that there is no one single answer, and it's best if we continue to adapt to the circumstances and curves that life throws our way. Flying is still fun, and in the end it's the people you meet through aviation that have left the largest mark on me, not the specific planes I've flown! So let's get out there and fly, and those of you considering a LSA in your future, come on over and let's take a flight!

Andy Karmy

Chapter 326 Secretary & newly minted LSA owner!

#### **Swift Fuel**

- Unleaded.
- As good or better than 100LL.
- No ethanol or alcohol in fuel.
- Can mix with 100LL.
- Higher octane, more power (104 MON).
- Heavier: 6.5 #/gal vs 6 for 100LL but more energy content therefore more miles per gallon.
- No aircraft mods required.
- Cheaper than 100LL.

I had sorta given up on the early promises of this miracle fuel but here is an article that revives hope. jb

#### by Dave Hirschman AOPA

For more than five years, Swift Enterprises, a small start-up firm founded by Purdue University Professor John Rusek and largely staffed by grads, has been designing and producing its own form of renewable fuel meant as an <u>unleaded replacement for 100LL</u>. Independent laboratories including the FAA's fuel and engine center have tested Swift fuel and determined it performs as well as—and, in some areas, <u>better than—100LL</u>, in a variety of piston aircraft engines. More detailed tests are planned.

Teledyne Continental Motors and Hawker Beechcraft have performed flight tests using Swift fuel in an IO-550-equipped Bonanza, and General Aviation Modifications Inc. (GAMI) has performed extensive ground tests.

Swift is about to enter an exhaustive data-gathering period in which it will collect thousands of hours of test data from many airplanes using its fuel in flight.

The company is seeking to show that its fuel meets 100LL performance standards and can safely replace avgas throughout the GA fleet. Swift officials estimate the process of defining, revising, and meeting those specifications with its unleaded fuel will take up to four years. In the meantime, Swift is exploring partnerships with a variety of energy firms capable of manufacturing its product. The manufacturing process, company officials say, is far simpler than refining oil and can be done just about anywhere in the world. Sorghum, switch grass, garbage, or petroleum can be used as raw materials and distilled into the chemicals used in Swift fuel.

Swift has a pilot manufacturing plant in Indiana capable of producing about 200 gallons of its fuel a day, and company officials say they are convinced it can be manufactured in industrial quantities at a cost well below leaded avgas.

## **Mighty Oaks**

In aviation history, decades before geeks and nerds altered our way of life, young and gutsy aviation pioneers changed the world with their wood sticks, bailing wire, canvas and aluminum.

How many of you know that in 1910, *mighty* Martin Marietta got its start in an abandoned California church? That's where Glenn L. Martin with his amazing mother Minta Martin

and their mechanic Roy Beal, constructed a fragile biplane that Glenn taught then himself to fly.

It has often been told how Douglas Aircraft started operations in 1920 in a barbershop's backroom on L.A.'s Pico Boulevard. Interestingly, the barber-shop is still operating.

The Lockheed Company built the first of their famous Vegas' in 1927 inside a building currently used by Victory Cleaners at 1040 Sycamore in Hollywood.

In 1922, Claude Ryan, a 24 year old military reserve pilot, was getting his hair cut in San Diego, when the barber mentioned that the' town's aviator was in jail for smuggling Chinese illegals up from Mexico. Claude found out that if he replaced the pilot sitting in the pokey,' that he would be able to lease the town's airfield for \$ 50 a month — BUT he also needed to agree to fly North and East — BUT not South!

Northrop's original location was an obscure So. California hotel. It was available because the police had raided the hotel and found that its steady residents were money-minded gals entertaining transitory male hotel guests.

Glenn Martin built his first airplane in a vacant church, before he moved to a vacant apricot cannery in Santa Ana. He was a showman and he traveled the county fair and air meet circuit as an exhibitionist aviator. From his exhibition proceeds, Glenn was able to pay his factory workers and purchase the necessary wood, linen and wire.

His mother, Minta and two men ran the factory while Glenn risked his neck and gadded about the country. One of his workers was 22-year old Donald Douglas [ who *WAS* the engineering department.] A Santa Monica youngster named Larry Bell [later founded Bell Aircraft ]ran the shop.

Another part of Glenn Martin's business was a flying school with several planes based at Griffith Park, and a seaplane operation on the edge of Watts.

His instructors taught a rich young man named Bill Boeing to fly. Then, Boeing bought one of Glenn Martin's seaplanes and had it shipped back to his home in Seattle. At the same time, Bill Boeing hired away Glenn's personal mechanic. Later, after Boeing's seaplane crashed in Puget Sound, he placed an order to Martin for replacement parts.

Still chafing from having his best mechanic 'swiped, '[ a trick he later often used himself ] Martin decided to take his sweet time and allowed Bill Boeing to 'stew' for a while.

Bill Boeing wasn't one to stew ' and he began fabricating his own aircraft parts, an activity that morphed into constructing entire airplanes. A former small shipyard nicknamed Red Barn became Boeing Aircraft's first home. Soon, a couple of airplanes were being built inside, each of them having a remarkable resemblance to Glenn Martin's airplane . . that, interestingly, HAD ITS OWN remarkable resemblance to Glenn Curtiss' airplane.

A few years later, when the Great depression intervened and Boeing couldn't sell enough airplanes to pay his bills, he diversified into constructing custom built speed boats and furniture for his wealthy friends.

After WWI, a bunch of sharpies from Wall Street gained control of the Wright Brothers Co. in Dayton and the Martin Company in L. A. and ' stuck them ' together as the Wright-Martin Company.

Wright-Martin began building an obsolete biplane design with a foreign Hispano-Suiza engine. Angered because he had been out-maneuvered with a bad idea, Martin walked out taking Larry Bell and key employees with him.

From the deep wallet of a wealthy baseball mogul, Martin was able to establish a new factory. Then his good luck continued, when the future aviation legend, Donald Douglas, joined his team. Quickly emerging from the team's efforts, was the Martin Bomber. Although too late to enter WWI, the Martin bomber showed its superiority when Billy Mitchell made everyone mad at him by sinking several captured German battleships and cruisers.

In Cleveland, a young fellow called 'Dutch Kindelberger joined Martin as an engineer. Later, as the leader of North American Aviation, Dutch became justifiably well-known.

Flashing back to 1920, Donald Douglas had saved \$60,000, returned to L. A. and rented a barbershop's backroom and loft space in a carpenter's shop nearby. There he constructed a classic passenger airplane called the Douglas *Cloudster*.

A couple of years later, Claude Ryan bought the *Cloudster* and used it to make daily flights between San Diego and Los Angeles. This gave Ryan the distinction of being the first owner/operator of Douglas transports. Claude Ryan later custom built Charles Lindbergh's 'ride' to fame . in the flying fuel tank christened: *The Spirit Of St. Louis*.

In 1922, Donald Douglas won a contract from the Navy to build several torpedo-carrying aircraft. While driving through Santa Monica's wilderness, Douglas noticed an abandoned, barnlike movie studio. He stopped his roadster and prowled around. That abandoned studio became Douglas Aircraft's first real factory.

With the \$120,000 contract in his hands, Donald Douglas could afford to hire one or two more engineers. My brother Gordon Scott had been schooled in the little known science of aviation at England's Fairey Aviation, so he hired Gordon.

My first association with the early aviation pioneers occurred when I paid my brother a visit at his new work site. Gordon was outside on a ladder washing windows . he was the youngest engineer . . the windows were dirty . .Douglas Aircraft Company had no extra money for janitors.

Gordon introduced me to a towhead guy called Jack Northrop, and another chap named Jerry Vultee. Jack Northrop had moved over from Lockheed Aircraft. And all of them worked together on the Douglas Aircraft's *world cruiser* design.

While working in his home at night and on weekends, Jack designed a wonderfully advanced streamlined airplane. When Allan Loughead [ Lock- heed ] found a wealthy investor willing to finance Northrop's new airplane, he linked up with Allan.

Together, they leased a Hollywood workshop and constructed the Lockheed Vega. It was sensational with its clean lines and high performance. Soon Amelia Earhart and others flew the Vega and broke numerous aviation world records.

I had the distinct pleasure of spending time with Ed Heinemann, who later designed the AD, A3D and A4D. He told me how my Dad would fly out to Palmdale with an experimental aircraft they were both working on.

They would fly it around for a few hops and come up with some fixes. After having airframe changes fabricated in a nearby machine shop, they would hop it again to see if they had gotten the desired results. If it worked out, Mr. Heinemann would institute the changes on the aircraft's assembly line. No money exchanged hands.

In May 1927, Lindbergh flew to Paris and triggered a bedlam where everyone was trying to fly everywhere. Before the first Lockheed Vega was built, William Randolph Hearst had already paid for it and had it entered in an air race from the California Coast to Honolulu.

In June 1927, my brother Gordon left Douglas Aircraft to become Jack Northrop's assistant at Lockheed. While there, Gordon managed to get himself hired as the navigator on Hearst's Vega.

The race was a disaster and ten lives were lost. The Vega and its crew including my brother . . vanished at sea.

A black cloud hung heavily over the little shop. However, Hubert Wilkins, later to become Sir Hubert Wilkins, acquired Vega # 2 and made a successful polar flight from Alaska to Norway. Then, a string of successful flights in the Vega, placed Lockheed in aviation's forefront.

I went to work for Lockheed as it 26th employee shortly after the disaster and I worked on the Vega. It was made almost entirely of wood and I quickly become a half-assed carpenter.

At this time, General Motors had acquired North American consisting of Fokker Aircraft, Pitcairn Aviation [ later Eastern Airlines] and Sperry Gyro-scope and hired Dutch Kindelberger away from Douglas to run it. Dutch moved the entire operation to L.A. where Dutch and his engineers came up with the P-51 Mustang.

Interestingly, just a handful of young men played roles effecting the lives of all Americans .as it initiated the So. California metamorphosis, from a semi-desert with orange groves and celluloid, into a dynamic complex, supporting millions.

Although this technological explosion had startling humble beginnings, taking root as *acorns* in — a barber shop's *back room* — a *vacant* church — and an abandoned cannery — but came to fruition as *mighty oaks*.

Source :Denham S. Scott, North American Aviation Retirees' Bulletin [ abridged ]

#### Calendar

Sep 4 -5 McMinnville Aircraft Fly-In [MMV]

Sep 5 Bremerton Blackberry Festival [PWT]

Sep 12 WAAAM Fly-In Hood River Ken Jernstedt Airfield [4s2]

Sep 13 Olympia Fly-In [OLM]

Sep 16 – 20 Reno Air Races

Oct 22 – 24 Copperstate Fly-In [CGZ]

Lost student pilot: "Unknown airport with Cessna 150 circling overhead, identify yourself."

end

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